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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/523,090

02/02/2005

Karl Schnedl

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02/22/2006

CHAPMAN AND CUTLER
111 WEST MONROE STREET
CHICAGO, IL 60603

EXAMINER

ANGLO, LHEIREN MAE ACOSTA

ART UNIT

PAPER NUMBER

2832

DATE MAILED: 02/22/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/523,090

Applicant(s)

SCHNEDL ET AL.

Examiner

Lheiren Mae A. Anglo

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2832

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1,9-11,14 and 15 is/are rejected.
- 7) ☒ Claim(s) 2-8,12,13 and 16-20 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 02 February 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 2006217.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

DETAILED ACTION

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 1 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The position of the "rails" on line 6 of claim 1 is unclear.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over McQuistian (US 6,648,276) in view of Horberg (US 3,192,350).

In regard to claim 1, McQuistian teaches in [Figs. 1 and 6] an end position detector [12,40,44] for movable switch parts [22,24], comprising a rod assembly [44,176,40] and a housing [26], into which the rod assembly penetrates and in which at least one sensor [not shown] for sensing an end position of the rod assembly is arranged, wherein the rod assembly is connected to a movable switch part such that it is adapted to be pivoted in a vertical plane that lies transverse to a longitudinal direction of rails [18] and the rod assembly comprises at least one rod [40] of circular cross

section. McQuistian does not teach that the rod in a region of the rod that penetrates into the housing in a sealed fashion carries on a periphery of the rod at least one switching flank that cooperates with a switch. Horberg teaches in [Figs. 4 and 8] that the rod [108] in a region of the rod that penetrates into the housing [12] in a sealed fashion [238] carries on a periphery of the rod at least one switching flank [150] that cooperates with a switch [80]. It would have been obvious to one of ordinary skill in the art at the time of the invention to have the rod penetrate into the housing in a sealed fashion and have a switching flank that cooperates with a switch so that the rod assembly would not be damaged by the environment and so that switch actuation could be provided by rod assembly movement.

In regard to claim 10, McQuistian teaches in [Fig. 6] an end position detector [12,40,44]. McQuistian does not teach that the switching flank is realized in the form of an end face of a tube that is adapted to be screwed on the rod. Horberg teaches in [Fig. 4] a switching flank [150] realized in the form of an end face of a tube [140] that is adapted to be screwed on to the rod [108]. It would have been obvious to one of ordinary skill in the art at the time of the invention to allow the switching flank to be screwed onto the rod because the method of attaching is an engineering design choice.

Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over McQuistian (US 6,648,276) in view of Horberg (US 3,192,350) in further view of Yasui et al. (Yasui hereinafter, US 3,898,399). McQuistian teaches in [Fig. 6] an end position detector [12,40,44]. McQuistian does not teach a switching flank that is adapted to be adjusted in an axial direction of the rod. Horberg teaches in [Fig. 4] a switching flank. It

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would have been obvious to one of ordinary skill in the art at the time of the invention to include a switching flank to actuate the switch. McQuistian and Horberg do not teach a switching flank that is adapted to be adjusted in an axial direction of the rod. Yasui teaches in [Fig. 3] that the switching flank [6,7] is adapted to be adjusted in an axial direction of the rod [5]. It would have been obvious to one of ordinary skill in the art at the time of the invention to make the switching flank adaptable to be adjusted in an axial direction of the rod to create a more universal switch mechanism.

In regard to claim 11, McQuistian teaches in [Fig. 6] that the end position detector [12,40,44] has an effective length of the rod [40] is variable and adapted to a respective travel stroke of the movable switch part [18].

In regard to claim 14, McQuistian teaches in [Fig. 6] an end position detector [12,40,44], wherein the housing comprises a guide tube [26], the length of which is greater than a maximum travel stroke of the movable switch part, wherein the rod [40] is guided in the guide tube in a sliding fashion.

Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over McQuistian (US 6,648,276) in view of Horberg (US 3,192,350) in further view of Logan (US 4,133,111). McQuistian teaches in [Fig. 6] and end position detector [12,40,44]. McQuistian does not teach that the switch comprises a spring-loaded plunger that engages into a groove defined by the switching flank in a correct end position of the movable switch part. Horberg teaches in [Fig. 4] a switch that comprises a spring-loaded plunger [col. 2, lines 58-63 and col. 3, lines 32-35]. It would have been obvious to one of ordinary skill in the art at the time of the invention to include a spring-loaded

plunger in the switch to resiliently urge the switching components towards the actuator. McQuistian and Horberg do not teach that the plunger engages into a groove defined by the switching flank in a correct end position of the movable switch parts. Logan teaches in Fig. 5 that the plunger [126,128] engages into a groove [114] defined by the switching flank [112] in a correct end position of the movable switch parts [126,128]. It would have been obvious to one of ordinary skill in the art at the time of the invention to have a groove defined by the switching flank since the groove provides the same operation.

Allowable Subject Matter

Claims 2-8, 12, 13, and 16-20 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

In regard to claim 2, the references do not teach that the housing is connected to a stationary part of the switch such that it is adapted to be pivoted in a vertical plane that lies transverse to the longitudinal direction of the rails.

In regard to claim 3, the references do not teach that the pivot support is achieved by utilizing elastic connecting elements or spherical bearings.

In regard to claim 4, the references do not teach that the rod assembly is connected to the movable switch part such that it is adapted to be displaced in the longitudinal direction of the rails.

In regard to claim 5, the references do not teach that the rod assembly is connected to a vertical bolt that is guided in a sliding fashion in an oblong hole that

extends in the longitudinal direction of the rails and is arranged in a base plate of the movable switch part. Claims 6-8 depend on claim 5.

In regard to claim 12, the references do not teach that the rod comprises an outside thread on an end of the rod that faces the movable switch part, and wherein the rod is adapted to be screwed into an inside thread of a part that is connected to the movable switch part, and fixed in a respective position.

In regard to claim 13, the references do not teach that the rod assembly and the housing are accommodated in a trough-like sleeper or in a stationary switch part.

Claim 16 is dependent on claim 7, claim 17 is dependent on claim 12, and claims 18-20 are dependent on claim 2.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lheiren Mae A. Anglo whose telephone number is (571) 272-2730. The examiner can normally be reached on Monday to Friday 8:00 am to 4:00 pm.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Elvin Enad can be reached on (571) 272-1990. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


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Lheiren Mae Anglo
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